

CIS Database Administration
CIS 382

Spring Semester 2018
T-Th 1:40PM – 3:05PM

Instructor: Professor Mark McKinley
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Office Hours: Email for an appointment.

Course Description:

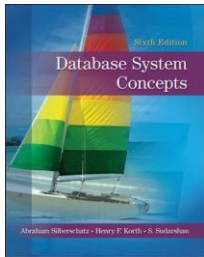
This is a course in Database design and development. Topics include data modeling, database design and Structured Query Language (SQL). Current and emerging topics in database systems are also covered. Prerequisites: CIS-221 or CIS-222, and CIS-225.

Course Objectives:

At the conclusion of this course, you will:

1. Design and use relational databases as an information systems professional or end user.
2. Formulate queries in SQL
3. Specify the data requirements of database applications containing forms and reports
4. Design entity relationship diagrams
5. Convert entity relationship diagrams into normalized relational databases
6. Understanding the principles of transaction processing and data warehouses.

Text:



Database System Concepts, Sixth Edition
Abraham Silberschatz; Henry Korth; S. Sudarshan
Publisher: McGraw Hill
Copyright year: © 2006
ISBN-978-0-07-352332-3

NOTE: All students are required to purchase their own individual copy of the texts. These texts will be used extensively throughout the course.

Course Structure:

This course will consist of primarily hands on demos and class work with one project. There will also be a weekly quiz covering the chapter readings. There will be a mid-term and a final consisting of a set of problems and essay questions.

Communication: Indiana Wesleyan University is giving you an official email account and I will use it when communicating with you. If I send information to that email account, you are responsible for reading it. Not reading email is not an excuse. In case of an emergency, text me at (260)251-3406.

Electronic Device usage: Please keep your Cell Phones, tablets etc, silent during class. If I can hear your device, it is NOT silent. Failure to be considerate to others will result in forfeiture of the offending device.

Syllabus Content: The instructor reserves the right to make changes to this syllabus, if deemed necessary. All changes will be provided to the students orally or in writing before the implementation of the change.

Weighted Grades:

Class Assignments:	30%
Midterm:	15%
Final:	15%
Class Participation:	10%
Quizzes:	20%
DB Project:	10%

Grading Scale:

95 – 100 ---	A	73 – 76 ---	C
90 – 94 ---	A-	70 – 72 ---	C-
87 – 89 ---	B+	65 – 69 ---	D+
83 – 86 ---	B	60 – 64 ---	D
80 – 82 ---	B-	0 - 59 ---	F
77 – 79 ---	C+		

Class Assignments: The majority of the work for this class will be in the form of application projects. Late work will be penalized points.

Midterm & Final exams: There will be a midterm exam and a final exam. Each exam will be a set of essay questions. Each exam is cumulative for the material covered to that point.

Quizzes: A quiz covering the contents of each chapter and class discussion will occur most every week. Some Quizzes will be shown on the screen, others may be on individual handouts. Both will be graded in class to immediately re-enforce the subject matter covered.

Participation: Every student is expected to attend every class and provide relevant input into the class discussions and projects.

DB Project: This project will provide an opportunity for students to discuss, explore, and exercise the topics addressed in the classroom via a program presented at the end of the course. Projects will be selected/assigned during the fourth week of classes. Further information on the form of this project will be given at that time.

Additional Information:

Academic Honesty:

Do not share or copy work. You are encouraged to discuss ideas, approaches, comments, etc. but your work must be your own. You should type in all the code yourself. Do not copy and paste from another source. (You may copy and paste code that you have created for this class.)

Cell Phones:

Please silence all cell phones while in class. If I can hear it, it is not silent! If it is necessary for you to take a call during class (for an emergency situation), please quietly leave the classroom so as not to disturb other students. No texting is permissible during class. Violators will be asked to surrender their cell phones during class for the duration of the course.

More Student Resources and Information can be found here:

<http://learn.indwes.edu/LearningStudio/cas-student-info.html>

The Lord has placed us here at this place and time for His purpose. We need to remember this often as it will shape what we do and how we do things.

I have high expectations for each class member; you should have high expectations for yourself.

If you need help, ask early and often!

Course Schedule

(subject to change)

Week	Date	Class Topic	Assignments	Readings
Week 1	1/9	Intro to Databases /Course expectations		Chapter 1
	1/11		Quiz 1	
Week 2	1/16	Intro to Relational Model		Chapter 2
	1/18	Setup MySQL	Quiz 2	
Week 3	1/23	Intro to SQL		Chapter 3
	1/25	Practice Exercises	Quiz 3	
Week 4	1/30	SQL programming		
	2/1	Practice Exercises	Quiz 4	
Week 5	2/6	Intermediate SQL		Chapter 4
	2/8	Practice Exercises	Quiz 5	
Week 6	2/13	NO CLASS (day of common learning)	Learn something new	
	2/15	Advanced SQL programming		Chapter 5
Week 7	2/20	SQL practice	Quiz 6	
	2/22	Midterm Exam	Study Chapters 0-4	
Week 8	2/27	Advanced SQL practice		Chapter 5
	3/1	SQL Exercises	SQL questions	
Week 9	3/6	NO CLASS	Relax	
	3/8	Spring Break	Be safe	
Week 10	3/13	Formal Relational Query Languages		Chapter 6
	3/15	Practice exercises	Quiz 7	
Week 11	3/20	Database Design		Chapters 7-9
	3/22	E-R Relational and Application	Quiz 8	
Week 12	3/27	Project Presentations		Chapters 14-16
	3/29	Additional presentations	Quiz 9	
Week 13	4/3	Data Storage/Querying*		Chapters 10-13
	4/5	Exercises	Quiz 10	
Week 14	4/10	System Architecture*		Chapters 17-19
	4/12	Exercises	Quiz 11	
Week 15	4/17	Review for Final Exam		
	4/19	NO CLASS Celebration of Scholarship	Study	
	4/24-26?	FINAL EXAM		